

FIGURE 1

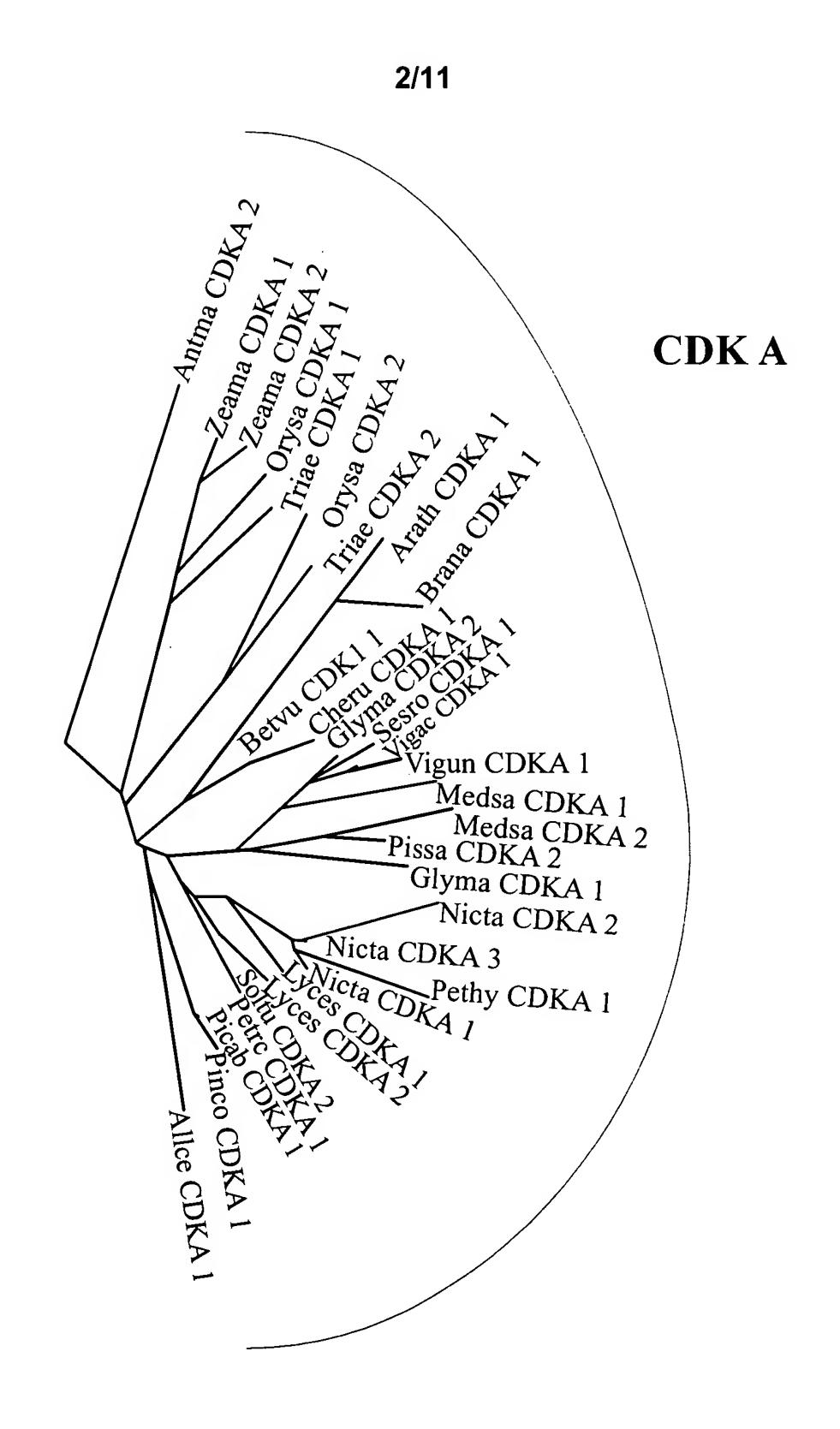


FIGURE 2

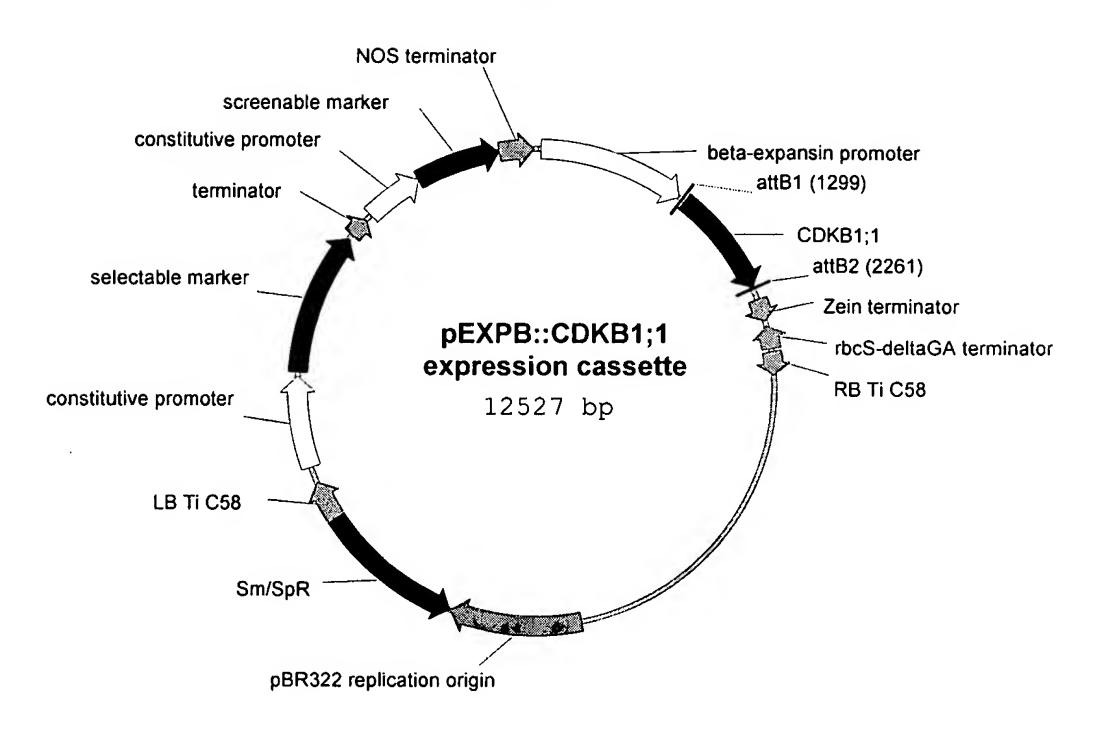


FIGURE 3

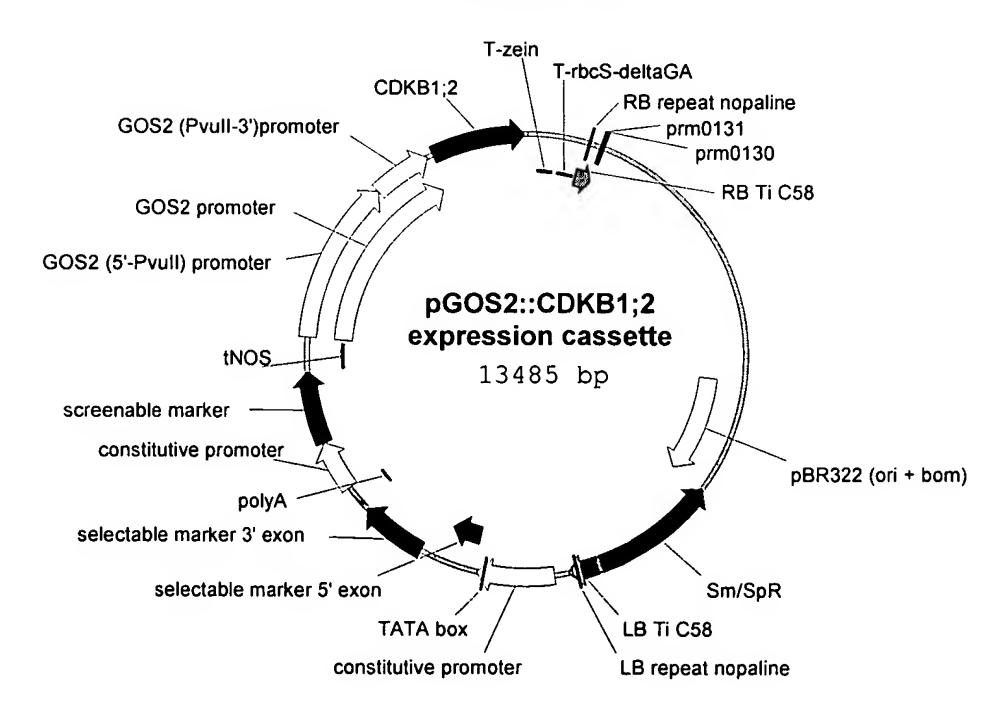


FIGURE 4

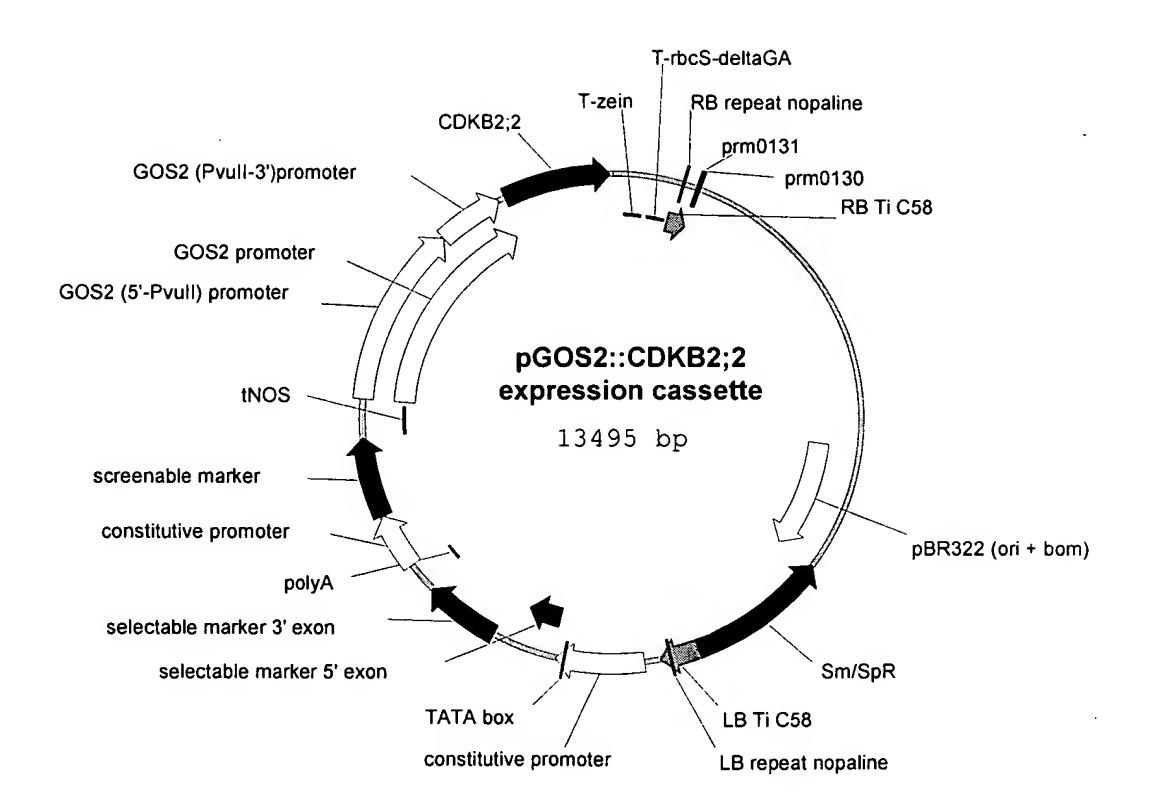


FIGURE 5

SEQ ID NO 1: DNA sequence of CDK B 1;1

SEQ ID NO 2: Protein sequence of CDK B 1;1

MEKYEKLEKVGEGTYGKVYKAMEKGTGKLVALKKTRLEMDEEGIPPTALREISLLQMLSTSI YVVRLLCVEHVHQPSTKSQSTKSNLYLVFEYLDTDLKKFIDSYRKGPNPKPLEPFLIQKLMF QLCKGVAHCHSHGVLHRDLKPQNLLLVKDKELLKIADLGLGRAFTVPLKSYTHEIVTLWYRA PEVLLGSTHYSTGVDMWSVGCIFAEMVRRQALFPGDSEFQQLLHIFRLLGTPTEQQWPGVST LRDWHVYPKWEPQDLTLAVPSLSPQGVDLLTKMLKYNPAERISAKTALDHPYFDSLDKSQF

SEQ ID NO 3: DNA sequence of CDK B 1;2

atggagaaatacgagaagctcgaaaaggtcggtgaaggaacctatggaaaagtctacaaagc aatggagaaaaccaccggaaaactcgtcgctctgaagaaaactaggctcgaaatggacgaag tacatcgttcgtctcctctgcgtcgaacatgttattcaatcgaaagattcgactgtttctca ctctcccaaatccaatctctatctcgtttttgagtatctcgacactgatctcaagaaattta tagattctcatagaaagggctcgaatcctagaccgcttgaggcttctcttgtgcagaggttt atgtttcagctttttaaaggtgtggctcattgtcatagccatggtgtgcttcaccgtgatct taaaccgcagaatcttctattggataaggataaagggattcttaagattgctgatttgggtc ttagtcgtgcttttactgtgcctcttaaggcttatacacatgagattgttactctttggtat agageteetgaagttttgettggttetaeteattaetetaetgetgttgatatttggtetgt tggatgcatctttgccgagatgattaggaggcaagctcttttccctggtgattctgagtttc agcaactacttcatattttcagattgttaggaacaccaactgagcagcaatggccgggtgta atggcattgcgtgactggcatgtctatccaaagtgggagccgcaagacttatcacgtgctgt tccatctctatctcctgaaggaattgatcttctcacgcaaatgttgaagtacaatccagcag aaagaatttcagcaaaagcagctctcgatcatccctactttgacagccttgacaaatctcag ttctga

FIGURE 6

SEQ ID NO 4: Protein sequence of CDK B 1;2

MEKYEKLEKVGEGTYGKVYKAMEKTTGKLVALKKTRLEMDEEGIPPTALREISLLQMLSQSI YIVRLLCVEHVIQSKDSTVSHSPKSNLYLVFEYLDTDLKKFIDSHRKGSNPRPLEASLVQRF MFQLFKGVAHCHSHGVLHRDLKPQNLLLDKDKGILKIADLGLSRAFTVPLKAYTHEIVTLWY RAPEVLLGSTHYSTAVDIWSVGCIFAEMIRRQALFPGDSEFQQLLHIFRLLGTPTEQQWPGV MALRDWHVYPKWEPQDLSRAVPSLSPEGIDLLTQMLKYNPAERISAKAALDHPYFDSLDKSQ F

SEQ ID NO 5: DNA sequence of CDK B 2;2

atggacaacaatggagttaaacccgctgtttccgccatggaagcctttgaaaagcttgagaa agtaggtgaagggacttatgggaaagtttacagagcaagagagaaagctactgggatgatcg ttgctttgaagaagacgcgtctccatgaggatgaagaaggtgttcctcccactactcttcgc gcaaggaataaacaaagaaggaaaaactgtactttaccttgttttcgagtatgttgatactg atctcaagaaattcatcagaagctttcgtcaagctggacagaacattccacaaaatactgtc aagtgcttgatgtaccagttatgcaaaggcatggctttttgccatggtcatggagtgttgca cagggatcttaagcctcacaatctcttgatggaccggaagacaatgacgctcaaaatagcag atcttggattagccagagccttcactctcccaatgaaaaagtatacacatgagattctaact ctatggtatagagctccggaagttcttcttggagcaacccattactctactggagtggatat ctgagctccaacagctcctccgtatattcaggttgttgggaacaccaaacgaagaagtttgg cctggagtaagcaaactcaaggactggcatgaatacccgcaatggaaaccgttgagtctctc cacagctgtgccaaacctcgacgaggctggacttgatctcttatctaaaatgctggagtacg agccagcaaaacgaatctcagcaaagaaagctatggagcatccttacttcgatgatttqcct gacaagtcctctctctqa

SEQ ID NO 6: Protein sequence of CDK B 2;2

MDNNGVKPAVSAMEAFEKLEKVGEGTYGKVYRAREKATGMIVALKKTRLHEDEEGVPPTTLR EISILRMLARDPHIVRLMDVKQGINKEGKTVLYLVFEYVDTDLKKFIRSFRQAGQNIPQNTV KCLMYQLCKGMAFCHGHGVLHRDLKPHNLLMDRKTMTLKIADLGLARAFTLPMKKYTHEILT LWYRAPEVLLGATHYSTGVDMWSVGCIFAELVTKQAIFAGDSELQQLLRIFRLLGTPNEEVW PGVSKLKDWHEYPQWKPLSLSTAVPNLDEAGLDLLSKMLEYEPAKRISAKKAMEHPYFDDLP DKSSL

SEQ ID NO 7: DNA sequence of CDK A;1 (Oryza sativa)

acctctcctccgattaatcccctccctcttcctcccacttctgcgcctgctcttcctc ccctcgccgaccctacctactcgcgccgccgccgtcgcattgggcggcaaacggagggggg ttaaccctgatggagcagtacgagaaggaggagaagattggggagggcacgtacggggtggt gtacagggcgcgggacaaggtcaccaacgagacgatcgcgctcaagaagatccggcttgagc aggaggatgagggcgtcccctccaccgcaatccgcgagatctcgctcctcaaggagatgcat cacggcaacatcgtcaggttacacgatgttatccacagtgagaagcgcatatatcttgtctt tgagtatctggatctggacctaaagaagttcatggactcttgtccagagtttgcgaaaaacc ccactttaattaagtcatatctctatcagatactccgcggcgttgcttactgtcattctcat agagttcttcatcgagatttgaaacctcagaatttattgatagatcggcgtactaatgcact gaagcttgcagactttggtttagccagggcatttggaattcctgtccgcacgtttactcacg aggttgtaaccttgtggtatagagctccagagatccttcttggatcaaggcagtattctaca ccagttgatatgtggtcagttggttgtatctttgcagaaatggtgaaccagaaaccactgtt ccctggtgattctgagattgatgaattatttaagatattcagggtactaggaactccaaatg aacaaagttggccaggagttagctcattacctgactacaagtctgctttccccaagtggcaa gcacaggatcttgcaactattgtccctactcttgaccctgctggtttggaccttctctctaa aatgcttcggtacgagccaaacaaaggatcacagctagacaggctcttgagcatgaatact tcaaggaccttgagatggtacaatgaccctgctatggctttacattggattggcatatgtat gggctgggctcctcatttcattccttctgtgaacgctgtgcccttcgtttgggcatttttg

SEQ ID NO 8: Protein sequence of CDK A;1 (Oryza sativa)

MEQYEKEEKIGEGTYGVVYRARDKVTNETIALKKIRLEQEDEGVPSTAIREISLLKEMHHGN IVRLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTLIKSYLYQILRGVAYCHSHRVL HRDLKPQNLLIDRRTNALKLADFGLARAFGIPVRTFTHEVVTLWYRAPEILLGSRQYSTPVD MWSVGCIFAEMVNQKPLFPGDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD LATIVPTLDPAGLDLLSKMLRYEPNKRITARQALEHEYFKDLEMVQ

SEQ ID NO 9: Protein sequence of Mutant 1 of CDK A;1

MEQHEKEEKIGEGTYGVVYRARDKVTNETIALKKIRLEQEDEGVPSTAIREISLLKEMHHGN IVRLHDVIHSEKRIYLDFEYLDLDLKKFMDSCPEFAKNPTLIKSYLYQILRGVAYCHSHRVL HRDLKPQNLLIDRRTNALKLADFGLARTFGIPVRTFTHEVVTLWYRAPEILLGSRQYSTPVD MWSVGCIFAEMVNQKPLFPGDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD LATIVPTLDPAGLDLLSKMLRYEPNKRITARQALEHEYFKDLEMVQ

SEQ ID NO 10: Protein sequence of Mutant 2 of CDK A;1

MEQYEKEEKIGEGTYGVVYRARDKVTNETTALKKIRLEQEDEGVPSTAIREISLLKEMHHGN IVRLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTLIKSYLYQILRGVAYCHSHRVL HRDLKPQNLLIDRRTNALKLADFGLARAFGIPVRTFTHEVVTLWYRAPEILLGSRQYSTPVD MWSVGCIFAEMVNQKPLFPGDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD LATIVPTLDPAGLDLLSKMLRYEPNKRITARQALEHEYFKDLEMVQ

SEQ ID NO 11: Protein sequence of Mutant 3 of CDK A; 1

MEQYVKEEKIGEGTYGVVYRARDKVTNETIALKKIRLEQEDEGVPSTAIREISLLKEMHHGN IVRLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTLIKSYLYQILRGVAYCHSHSVL HRDLKPQNLLIDRRTNALELADFGLARAFGIPVRTFTHEVVTLWYRAPEILLGSRQYSTPVD MWSVGCIFAEMVNQKPLFPGDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD LATIVPTLDPAGLDLLSKMLRYEPNKRITARQALEHEYFKDLEMVQ

SEQ ID NO 12: Protein sequence of Mutant 4 of CDK A; 1

MEQYEKEEKIGEGTYGVVYRARDKVTNETIALKKIRLEQEDEGVPSTAIREISLLKEMHHGN IVRLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTLIKSYLYQILRGVAYCHSHRVL HRDLKPQNLLIDRRTNALKLADFGLARAFRIPVRTFTHEVVTLWYRAPEILLGSRQYSTPVD MWSVGCIFAEMVNQKPLFPGDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD LATIVPTLDPAGLDLLSKMLRYEPNKRITARQALEHEYFKDLEMVQ

SEQ ID NO 13: Protein sequence of Mutant 5 of CDK A; 1

MEPYEKEEKIGEGTYGVVYRARDKVTNETIALKKIRLAQEDEGVPSTAIREISLLKEMHHGN IVRLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTLIKSYLYQILRGVAYCHSHRVL HRDLKPQNLLIDLRTNALKLADFGLARAFGIPVRTFTHEVVTLWYRAPEILLGSRQYATPVD MWSVGCTFAEMVNQKPLFPGDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD LATIVPTLDPAGLDLLSKVLRYEPNKRITAQQALEHEYFKDLEMVQ

SEQ ID NO 14: DNA sequence of beta-expansin promoter EXPB8

aaaaccaccgagggacctgatctgcaccggttttgatagttgagggacccgttgtgtctggt tttccgatcgagggacgaaaatcggattcggtgtaaagttaagggacctcagatgaacttat tccggagcatgattgggaagggacataaggcccatgtcgcatgttttggacggtccag atctccagatcactcagcaggatcggccgcgttcgcgtagcacccgcggtttgattcggctt cccgcaaggcggccggtggccgtgccgccgtagcttccgccggaagcgagcacgccgcc tactctctccgtttcacaatgtaaatcattctactattttccacattcatattgatgttaat gaatatagacatatatatctatttagattcattaacatcaatatgaatgtaggaaatgctag tgaaagaattaatgcaagatcgtatctgccgcatgcaaaatcttactaattgcgctgcatat atgcatgacagcctgcatgcgggcgtgtaagcgtgttcatccattaggaagtaaccttgtca ttacttataccagtactacatactatagtattgatttcatgagcaaatctacaaactgg aaagcaataagaaatacgggactggaaaagactcaacattaatcaccaaatatttcgccttc tccagcagaatatatctctccatcttgatcactgtacacactgacagtgtacgcataaac gcagcagccagcttaactgtcgtctcaccgtcgcacactggccttccatctcaggctagctt tctcagccacccatcgtacatgtcaactcggcgcgcgcacaggcacaaattacgtacaaac ccgtccacccgcgcctcacctcgccgactataaatacgtaggcatctgcttgatcttgtca aca

SEQ ID NO 15: DNA sequence of GOS2 promoter

atataaaatgagaccttatatatgtagcgctgataactagaactatgcaagaaaactcatc cacctactttagtggcaatcgggctaaataaaaaagagtcgctacactagtttcgttttcct tagtaattaagtgggaaaatgaaatcattattgcttagaatatacgttcacatctctgtcat gaagttaaattattcgaggtagccataattgtcatcaaactcttcttgaataaaaaatctt tctagctgaactcaatgggtaaagagagagattttttttaaaaaaatagaatgaagatattc tgaacgtattggcaaagatttaaacatataattatataattttatagtttgtgcattcgtca attgacttatttttattatttttttttcgattagatgcaaggtacttacgcacacatt tgtgctcatgtgcatgtgtgagtgcacctcctcaatacacgttcaactagcaacacatctct aatatcactcgcctatttaatacatttaggtagcaatatctgaattcaagcactccaccatc accagaccacttttaataatatctaaaatacaaaaaataattttacagaatagcatgaaaag gcgccaatctcccatattgggcacacaggcaacaacagagtggctgcccacagaacaaccca caaaaaacgatgatctaacggaggacagcaagtccgcaacaaccttttaacagcaggctttg cggccaggagaggaggaggcaaagaaaccaagcatcctcctcctccatctataaat tcctcccccttttcccctctatataggaggcatccaagccaagaagagggagagcacca aggacacgcgactagcagaagccgagcgaccgccttcttcgatccatatcttccggtcgagt tcttggtcgatctcttccctcctccacctcctcacagggtatgtgcccttcggttgttc ttggatttattgttctaggttgtgtagtacgggcgttgatgttaggaaaggggatctgtatc tgtgatgattcctgttcttggatttgggatagaggggttcttgatgttgcatgttatcggtt cggtttgattagtagtatggttttcaatcgtctggagagctctatggaaatgaaatggttta gggtacggaatcttgcgattttgtgataccttttgtttgaggtaaaatcagagcaccggtga ttttgcttggtgtaataaagtacggttgtttggtcctcgattctggtagtgatgcttctcg atttgacgaagctatcctttgtttattccctattgaacaaaaataatccaactttgaagacg gtcccgttgatgagattgaatgattgattcttaagcctgtccaaaatttcgcagctggcttg tttagatacagtagtccccatcacgaaattcatggaaacagttataatcctcaggaacaggg tcactttctggttcagttcaatgaattgattgctacaaataatgcttttatagcgttatcct agctgtagttcagttaataggtaatacccctatagtttagtcaggagaagaacttatccgat ttctgatctccatttttaattatatgaaatgaactgtagcataagcagtattcatttggatt attttttttttagctctcaccccttcattattctgagctgaaagtctggcatgaactgtcct caattttgttttcaaattcacatcgattatctatgcattatcctcttgtatctacctgtaga gggatagttatactgcttgttcttatgattcatttcctttgtgcagttcttggtgtagcttg ccactttcaccagcaaagttc

SEQ ID NO 16: DNA sequence of sense primer prm0350

ggggacaagtttgtacaaaaagcaggcttcacaatggagaagtacgagaagctaga

SEQ ID NO 17: DNA sequence of antisense primer prm0351 ggggaccactttgtacaagaaagctgggttcagaactgagacttgtcaagg

SEQ ID NO 18: DNA sequence of sense primer prm439
ggggacaagtttgtacaaaaaagcaggcttcacaatggagaaatacgagaagctc

SEQ ID NO 19: DNA sequence of antisense primer prm440 ggggaccactttgtacaagaaagctgggtggtcagaactgagatttgtc

CDKB2.1	MDEGVIAVSAMDAFEKLEKVGEGTYGKVYRAREKATGKIVALKKTRLHEDEEGV PSTT	58
CDKB2.2	MDNNGVKPAVSAMEAFEKLEKVGEGTYGKVYRAREKATGMIVALKKTRLHEDEEGVPPTT	60
CDKB1.1	MEKYEKLEKVGEGTYGKVYKAMEKGTGKLVALKKTRLEMDEEGIPPTA	48
CDKB1.2	MEKYEKLEKVGEGTYGKVYKAMEKTTGKLVALKKTRLEMDEEGIPPTA	48
	*: :************ ** ** :****** ** :*:	
CDVDO 1		777
CDKB2.1	LREISILRMLARDPHVVRLMDVKQGLSKEGKTVLYLVFEYMDTDVKKFIRSFR	
CDKB2.2	LREISILRMLARDPHIVRLMDVKQGINKEGKTVLYLVFEYVDTDLKKFIRSFR	
CDKB1.1	LREISLLQMLSTSIYVVRLLCVEHVHQPSTKSQSTKSNLYLVFEYLDTDLKKFIDSYR	
CDKB1.2	LREISLLQMLSQSIYIVRLLCVEHVIQSKDSTVSHSPKSNLYLVFEYLDTDLKKFIDSHR	108
	*****: *: *: *: *: *: *: *: *: *: *: *:	
CDKB2.1	STGKNIPTQT IKSLMYQLCKGMAFCHGHGILHRDLKPHNLLMDPKTMRLKIADLGLAR	169
CDKB2.2	QAGQNIPQNTVKCLMYQLCKGMAFCHGHGVLHRDLKPHNLLMDRKTMTLKIADLGLAR	171
CDKB1.1	KGPNPKPLEPFLIQKLMFQLCKGVAHCHSHGVLHRDLKPQNLLLVKDKELLKIADLGLGR	
CDKB1.2	KGSNPRPLEASLVQRFMFQLFKGVAHCHSHGVLHRDLKPQNLLLDKDKGILKIADLGLSR	
	· · · · · · · · · · · · · · · · · · ·	
CDKB2.1	AFTLPMKKYTHEILTLWYRAPEVLLGATHYSTAVDMWSVGCIFAELVTNQAIFQGDSELQ	229
CDKB2.2	AFTLPMKKYTHEILTLWYRAPEVLLGATHYSTGVDMWSVGCIFAELVTKQAIFAGDSELQ	231
CDKB1.1	AFTVPLKSYTHEIVTLWYRAPEVLLGSTHYSTGVDMWSVGCIFAEMVRRQALFPGDSEFQ	226
CDKB1.2	AFTVPLKAYTHEIVTLWYRAPEVLLGSTHYSTAVDIWSVGCIFAEMIRRQALFPGDSEFQ	228
	:*:* **:*****************	
CDKB2.1	QLLHIFKLFGTPNEEMWPGVSTLKNWHEYPQWKPSTLSSAVPNLDEAGVDLLSKMLQYEP	289
CDKB2.2	QLLRIFRLLGTPNEEVWPGVSKLKDWHEYPQWKPLSLSTAVPNLDEAGLDLLSKMLEYEP	
CDKB1.1	QLLHIFRLLGTPTEQQWPGVSTLRDWHVYPKWEPQDLTLAVPSLSPQGVDLLTKMLKYNP	
CDKB1.1	QLLHIFRYLLLVFDANVY-VYRNQFRTLAH	257
CDIGI. 2	***:**: : : : : * :. : *	251
CDKB2.1	AKRISAKMAMEHPYFDDLPEKSSL 313	
CDKB2.2	AKRISAKKAMEHPYFDDLPDKSSL 315	
CDKB1.1	AERISAKTALDHPYFDSLDKSQF- 309	
CDKB1.2		